

**AMENDMENTS TO THE SPECIFICATION**

**Please replace lines 27-30 of page 1 with the following:**

- (1) aucaaugaggaagcugcagaaugg (SEQ ID NO:1);
- (2) gggaagugacauagcaggaacuacuag (SEQ ID NO:2);
- (3) uaauuaaaauaguaagaauagcccu (SEQ ID NO:3);

**Please replace lines 1-6 of page 2 with the following:**

- (4) uauuggguaccugugugga (SEQ ID NO:4);
- (5) gccauuucccauacauuauugugc (SEQ ID NO:5);
- (6) uuauauggcagucuagcagaa (SEQ ID NO:6);
- (7) accacacacaaggcuacuucccugau (SEQ ID NO:7);
- (8) acagccgccuagcauuucaucac (SEQ ID NO:8);
- (9) ggauggugcuucaagcuaguaccaguu. (SEQ ID NO:9)

**Please replace Table 1 bridging pages 4 and 5 with the following:**

No	HIV gene	RNA sequence
1	gag-pol	<u>Aucaaugaggaagcugcagaaugg (SEQ ID NO:1)</u>
2	gag-pol	<u>Gggaagugacauagcaggaacuacuag (SEQ ID NO:2)</u>
3	gag-pol	<u>uaauuaaaauaguaagaauagcccu (SEQ ID NO:3)</u>
4	env	<u>Uauuggguaccugugugga (SEQ ID NO:4)</u>
5	env	<u>Gccauuucccauacauuauugugc (SEQ ID NO:5)</u>
6	Env	<u>Uuauauggcagucuagcagaa (SEQ ID NO:6)</u>
7	Nef	<u>Accacacacaaggcuacuucccugau (SEQ ID NO:7)</u>
8	3-UTR	<u>Acagccgccuagcauuucaucac (SEQ ID NO:8)</u>
9	LTR	<u>Ggauggugcuucaagcuaguaccaguu (SEQ ID NO:9)</u>

**Please replace lines 10-11 of page 5 with the following:**

5'      uauggggguaccuguguggauu (SEQ ID NO:10)

3'      uuauaccccauggacacaccu (SEQ ID NO:11)

**Please replace the paragraph bridging pages 5 and 6 with the following:**

As showed in figure 1, plasmid pEGFPCI (Clontech, CA) was double digested with EcoRI and BamHI at 37°C for 1 hour. Large fragment was extracted and was used as vector; HIV gp120 gene was obtained by PCR using 2ng HIV cDNA(Bru strain) as template plus gp120 primers(A:5' cggaattctaaagagcacaaga cagtggac, (SEQ ID NO:12) B: 5' cggatcctactctaccgtcagcgtcattga (SEQ ID NO:13) 100ng each) in a buffer containing 2.5u Pfu high fidelity DNA polymerase, dNTP 250μmol/L, 2.5mmol/L MgCl<sub>2</sub>, 25mmol/L TrisHCl(pH8.3). Polymerase chain reaction (PCR)was carried out using Perkin Elmer 9700 thermocycler (94°C 30s, 50°C 30s, 72°C 90s, 30cycles), DNA fragment resulted PCR was double digested by EcoRI and BamHI(Biolabs) after being purified by Qiagen Gel Extraction Kit and ligated with the vector described above. The ligated mixture was transformed into E.coli JM109 (Promega), and the plasmid pEGFP-gp120 was obtained. Fusion protein of GFP and HIV gp120 should be expressed by transfection of the plasmid into mammalian cells.

**Please replace lines 1-2 of page 7 with the following:**

5'      gugacauagcaggaacuacuu (SEQ ID NO:14)

3'      uucacuguaucguccuugaug (SEQ ID NO:15)

**Please replace lines 17-18 of page 7 with the following:**

5'      accacacacaaggcuacuuuu (SEQ ID NO:16)

3' uuugguguguguuccgaugaa (SEQ ID NO:17)

**Please replace Table 3 on page 8 with the following:**

No	DsRNA	Targeted HIV gene	Efficacy of inhibition
1	5' aucaaugaggaagcugcaguu (SEQ ID NO:18) 3' uuuaguuaucuccuucgacguc (SEQ ID NO:19)	gag-pol	++++
2	5' guaagaugucuagcccuguu (SEQ ID NO:20) 3' uucauucuuacagaucgggac (SEQ ID NO:21)	gag-pol	+++
3	5' uucccauacauuuugugcuu (SEQ ID NO:22) 3' uuaaggguauguaauaacacg (SEQ ID NO:23)	env	+++
4	5' aaauggcagucuagcagaauu (SEQ ID NO:24) 3' uuuuuaccgucagaucgucuu (SEQ ID NO:25)	env	+++

**Please replace lines 13-14 on page 8 with the following:**

A:5' gateccc ttccataco ttattgtgttcaagagagcacataatgtatgggaatttttgaaa (SEQ ID NO:26)

B:5' agcttttccaaaaattcccatatattgtgtctcttgaagcacataatgtatgggaaggg (SEQ ID NO:27)

**Please replace the paragraph bridging pages 8 and 9 with the following:**

As shown in figure 4, Human H1 promoter was amplified by primer 1 (5' - TAATTAATGCGGCCGCAATTCGAACGCTGACGTC-3') (SEQ ID NO:28) and primer 2 (5' - GCACTAGTAAGCTTGGATCCGTGGTCTCATACAGAACTTATAAGATTCCC-3' (SEQ ID NO:29) using 1µg human genomic DNA as templates. and cloned into AseI and XbaI sites of plasmid pEGFP (Clontech) . The ligated mixture was transformed into E.

coli JM109, and the recombinant plasmid pHI was obtained. Annealed double strand DNA fragment described was cloned into pHI at its BamHI and HindIII sites, and a new recombinant plasmid, pHI-gp120i, was obtained. Hairpin RNA could be transcribed by RNA polymerase III in the cells harboring pHI-gp120i.